

REMARKS

Reconsideration of the application is respectfully requested in view of the following responsive remarks. For the Examiner's convenience and reference, Applicant's remarks are presented in the order in which the corresponding issues were raised in the Final Office Action, dated June 23, 2006. The Applicant also has attempted to address the brief comments by the Examiner in last Office Action dated September 13, 2006.

In the Final Office Action of June 23, 2006 the following actions were taken:

(1) Claims 1-2, 4-12, and 27-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Pat. No. 63-061065 (hereinafter "Pentel") in view of U.S. Pub. No. 2004/0110869 (hereinafter "Denninger");

(2) Claims 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Pentel in view of Denninger and further in view of U.S. Pat. No. 5,279,652 (hereinafter "Kaufmann");

(3) Claims 13-18 and 29-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Denninger in view of Pentel and Kaufmann; and

(4) Claims 19-26 and 31-32 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Denninger in view of Pentel and Kaufmann.

It is respectfully submitted that the presently pending claims be allowed based on the remarks below.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 1-32 U.S.C. § 103(a) as being unpatentable over several references.

The Applicant does not deem it necessary to recite the entire case law standard required in order to establish a *prima facie* case of obviousness. However, Applicant, would like to briefly remind the Examiner of the required three criteria for a *prima facie* case of obviousness, namely that the asserted references as modified or combined must: 1) teach or suggest each and every element of the claimed invention; 2) provide sufficient motivation for the modification or combination asserted; and 3) provide a sufficient likelihood of successfully making the modification or combination.

With the above background in mind, the Applicant contends that a *prima facie* case of obviousness with respect to pending claims has not been established. Specifically, the

references do not provide sufficient teachings or motivation to be modified or combined in order to arrive at Applicant's claimed invention. Further, Applicant contends that the combination of references is based on hindsight. Therefore, without knowledge of the disclosure of the present invention, one of ordinary skill in the art would not be able to make the combinations proposed to arrive at the claimed invention.

Emphasis on the independent claims is provided herein, as the Applicant asserts that these claims are all patentably distinct over the prior art. Specifically, the Examiner has rejected claims 1-32 as being obvious in view various combinations of prior art, each of which includes the following references: Pentel, Kaufmann, and Denninger. Thus, a brief discussion of the Pentel, Denninger, and Kaufmann references is believed to be in order.

Pentel

The Examiner references a highlighter ink composition from the Pentel abstract. The Pentel abstract (English translation) suggests that the purpose of the composition is to keep a highlighter pen tip "slightly drying" "even if the cap is kept removed for a long time." (see Abstract). The abstract does not disclose any purpose or intent that the invention was to reduce smearing of highlighted images, nor does it provide any results or teachings that it would indicate reduction of smear. The Examiner references the composition as containing a) a coloring material; b) an organic solvent; and c) an acid compound (including ascorbic acid). However, Pentel does not appear to disclose the use of a highlighter colorant that is an acid-functionalized pigment or a fluorescent colorant as required by the present invention.

Denninger

Denninger teaches a highlighter composition that does not smear a printed image upon application. Denninger achieves this with a highlighter composition that includes: a polymer dispersion, polyvalent salts (such as zinc chloride, see Example 1), and water (other dyes, marking agents, additives, and moisture retaining agents are optional) (see paras. [0013] and [0014]). Denninger does not utilize an acid buffer as described and claimed by the Applicant. Denninger discloses the general mechanism as to how printed images are smeared by highlighters (see [0005]). Denninger then states additional problems (see paras. [0006]-[0008]) and specific cures that are ineffective (see [0009]-[0012]). In fact, Denninger teaches that one such ineffective solution for the smearing problem is to add acid to the highlighter

composition, since “the addition of acids unstabilises [sic] the marking liquid itself.” (see para. [0009]).

Kaufmann

Kaufmann teaches the addition of an anti-blocking additive to a marking fluid to keep the marker tip from drying out. See abstract. Specifically, Kaufmann claims its invention is “directed to the use of solids as anti-blocking additives in common marking fluids . . . to provide a protecting and the evaporation hindering closure of the open, unprotected and unused capillary outlet opening.” See col. 1, lines 9-14. Kaufmann defines the problem as “the capillary opening” becomes “clogged or plugged due to the drying of the marking fluid.” See col. 1, lines 20-22. The solution requires an anti-blocking additive that “has the ability to crystallize out of the solvent” so that a “liquid crystalline to solid boundary [forms] hinder[ing] the evaporation of the solvent marking fluid.” See col. 2, lines 20-22; col. 3, lines 12-14. Kaufmann discloses that one anti-blocking agent can be an organic acid, including succinic acid. See col. 4, lines 43-45, 63.

Claims 1-32

The Examiner has rejected claims 1-32 as being unpatentable over various combinations of Pentel, Denninger, and Kaufmann. Specifically, each 103 rejection contains a combination of Pentel and Denninger. The Examiner identifies that Pentel lacks the teaching of (1) succinic acid as an acid buffer, (2) fluorescent colorant as a highlighter colorant, (3) water or diethylene glycol as a liquid vehicle, and (4) Acid Blue 9 as a highlighter colorant. The Examiner combines Pentel with Kaufmann to address the first deficiency; specifically, the absence of succinic acid. The Examiner also combines Pentel with Denninger to address the other three deficiencies; specifically, the fluorescent colorant, water or diethylene glycol, and the Acid Blue 9. However, as previously discussed, in order to sustain a 103 rejection, there must be some suggestion or motivation to combine the references.

The Applicant contends that the combination of Denninger with Pentel and/or Kaufman is improper. A proper 103 rejection must provide a combination of references that would give a likelihood of success at achieving the present invention. In this case, Denninger could not be combined with any acid-containing highlighter ink composition, since Denninger specifically teaches away from such compositions. Specifically, Denninger first

explains the problem as after highlighting ink “the stabiliser [sic] of the ink experiences incipient dissolution . . . and that results in smearing of the text . . .” See [0008]. Denninger then teaches that acids cannot work in a highlighter composition, stating that “[t]he addition of acid however has not proven to be suitable in a practical context as on the one hand, dyes frequently react to changes in the pH-value by color changes, and on the other hand, the addition of acids unstabilises [sic] the marking liquid itself” (see [0009]). Denninger further explains that “even marking liquids with a pH-value in the weakly acid range do not afford any improvement in the situation . . .” (underlining added). See [0009].

As the Applicant has raised the issue of teaching away, the Applicant would like to review the current case law regarding teaching away for the Examiner’s convenience. The Court of Appeals for the Federal Circuit has clearly stated that “an applicant may rebut a *prima facie* case of obviousness by showing that the prior art teaches away from the claimed invention in any material respect.” In re Petersen, 315 F.3d 1325, 1331 (Fed. Cir. 2003). The Court has also stated that “[w]e have noted elsewhere, as a ‘useful general rule,’ that references that teach away cannot serve to create a *prima facie* case of obviousness.” (emphasis added) McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1354 (Fed. Cir. 2001). In identifying the appropriate standard for teaching away, the Court has further stated:

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be **discouraged from following the path set out in the reference**, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course depend on the particular facts; in general, **a reference will teach away if it suggests that the line of development** flowing from the reference's disclosure **is unlikely to be productive** of the result sought by the applicant.” (emphasis added) In re Gurley, 27 F.3d 551, 553 (Fed. Cir. 1994).

Clearly, in the present case, a person of ordinary skill in the art would be discouraged from adding a composition that contains acid, such as that described in Pentel, to Denninger’s composition since Denninger specifically states that the addition of acids does not work. It is worthy to note that Denninger not only states that the addition of acids “do[es] not afford any improvement,” but also that the addition of acids creates problems such as color changing and unstabilizing the highlighter liquid. See [0009]. Based on these explicit statements, Denninger teaches away from Pentel and Kaufmann as it would discourage a person of

ordinary skill in the art to combine acid to a highlighter composition and since it suggests that the such a combination is unlikely produce the result sought by the present application.

In the last office action, the Examiner provided a brief response, indicating that Pentel was the primary reference to which Denninger was added. However, the order of the combination is not a factor in the current case law regarding teaching away and the current situation. The Applicant contends that the case law is still valid regardless of what seems to be an arbitrary order of asserted references. Whether Denninger is the primary reference or the secondary reference, it still teaches away from allowing for the presence of acid, making the combination improper.

Specifically, in the last office action, the Examiner has stated that Pentel discloses all the limitations of the invention except for the acid-functionalized pigment or fluorescent colorant. The Examiner then uses the Acid Blue-9 disclosed in Denninger to cure the deficiency of Pentel. To begin, Acid Blue-9 is a dye, whereas the claimed invention is drawn to acid-functionalized pigments. Acid functionalized pigments are pigments where acid groups are affirmatively attached or associated with the surface a pigment, and thus, can be very acidic. Thus, to compare an Acid Blue-9 dye to an acid functionalized pigment is incongruent. The Applicant has requested an RCE so the Examiner may fully consider this response including the teaching away case law. If the Examiner has any concerns that have not been addressed, the Applicant respectfully requests a detailed explanation of those concerns; enabling the Applicant to provide an appropriate response.

Based on the case law and the explicit statements found in the Denninger reference, the Applicant contends that the combination of Denninger with any highlighter composition that contains acid is improper as Denninger teaches away from such acid compositions. Therefore, the Applicant maintains that the present claim set is allowable in present form and respectfully requests that the Examiner withdraw the current 103 rejections.

CONCLUSION

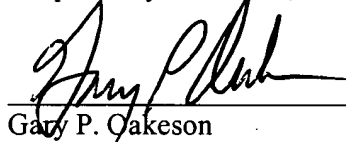
Since Denninger specifically teaches away from Pentel and Kaufmann, the Applicant respectfully asserts the Examiner has improperly combined references and therefore has not satisfied the requirement for establishing a case of *prima facie* obviousness. Therefore, the pending claim set should be allowable. Reconsideration is respectfully requested.

In view of the foregoing, the Applicant submits that claims 1-32 present allowable subject matter and allowance is respectfully requested. If any impediment to the allowance of these claims remains after consideration of the above remarks, and such impediment could be removed during a telephone interview, the Examiner is invited to telephone W. Bradley Haymond (Registration No. 35,186) at (541) 715-0159 so that such issues may be resolved as expeditiously as possible.

Please charge any additional fees except for Issue Fee or credit any overpayment to Deposit Account No. 08-2025.

Dated this 20th day of October, 2006.

Respectfully submitted,



Gary P. Oakeson
Attorney for Applicant
Registration No. 44,266

THORPE NORTH & WESTERN, LLP
8180 South 700 East, Suite 200
Sandy, Utah 84070
(801) 566-6633

On Behalf Of:
HEWLETT-PACKARD COMPANY
1000 NE Circle Blvd., m/s 422B
Corvallis, OR 97330-4239
(541) 715-0159